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Multi-stakeholder dialogue

Note by the Secretary-General

Addendum

Discussion paper contributed by the Women's Major Group**

Summary

This paper was developed by the United Nations Forum on Forests major group focal points for women to provide input to the discussions of the Forum at its third session. It indicates some steps taken by women in Ghana, Uganda and other countries towards ensuring equity and sustainability within the forest sector and obstacles that women have encountered in implementing sustainable forest management, as well as women's recommendations to Governments and other international forest policy players on the way forward in partnership with women in forests.

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** Prepared by the Uganda Women Tree Planting Movement and the Green Earth Organization — Ghana, in conjunction with forest-related women networks. Contacts for all major group focal points are available at http://www.un.org/esa/forests/contacts-major_groups.html.

03-29667 (E) 080503

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I. Introduction

1. For centuries, women have gathered, processed and marketed forest products for households in Africa, Asia and Latin America to meet subsistence needs, affecting and being affected by the issues addressed at the third session of the United Nations Forum on Forests on economic aspects of forests, forest health and productivity and maintaining forest cover to meet present and future needs.

2. Women themselves recognize the problems of deforestation, desertification and environmental degradation. Given their close link to forests in their daily lives, they are the first to suffer, as these environmental changes affect their ability to obtain firewood, water and other resources for household use and economic activities. In many countries, large areas of communal forestland are being cleared for agriculture or for commercial forestry. In addition to negative ecological and social effects, this widespread deforestation and land conversion reduces access to forest products that are required by women and their families on a daily basis, thereby adding to the drudgery of women, who are forced to cover long distances and spend more time in search of much-needed fuelwood and other forest products.

3. For example, in peri-urban centres in Northern Ghana and rural India women spend between 4-6 hours collecting fuelwood, fodder and cooking. In some cases, this extreme physical drudgery causes serious reproductive problems in women.[1] This situation is compounded by male migration, as males leave rural villages to search for work in urban centres, which inevitably increases the work and responsibilities that fall on women, leaving less time for the demanding tasks of collecting and processing forest products.

4. The sustainable use of forests requires the participation of all rural populations, including their female segment. Although women's needs often differ from those of men, many programmes tend to overlook women's specific needs regarding forestry, mainly because policy makers and planners lack adequate data, information and methodologies to address them. This report hopes to provide a basic introduction to the central role women play in forest management and will provide concrete suggestions as to how Governments and other global forest players can facilitate the inclusion of women in international forest policy.

II. Women's contribution to the economic aspects of forests

5. Women in rural forested areas are key actors in using and providing several types of non-timber forest products to markets. They spend most of their time in forests gathering fuelwood and many non-timber products, such as gum, fruits, oils, fibres and vines for cloth- and mat-making. Thus, forests provide a major source of paid employment for rural women. Furthermore, women tend to be more dependent than men on trees and small-scale forest industries for income. In Uttar Pradesh, India, one study showed that women derived 33 to 45 per cent of their income from forests and common land, compared with only 13 per cent for men. However, although a significant proportion of the forestry industry workforce is made up of women, their roles are not fully documented or recognized, their working conditions tend to be poor and their wages lower than those of men.

6. Women collect and sell non-timber products worldwide. In order to ensure their continuous supply of forest products to identified markets, some women have

established woodlots and have been trained by women's organizations in snail rearing and mushroom cultivation. For example, Green Earth Organization trained 200 women in snail rearing, mushroom and woodlot cultivation in Beyin and Aidozuazo, the western region of Ghana, in 1999. These women generated income from these activities, which they use for basic development needs, such as their children's school fees. In the Tano District of Ghana, similar projects were carried out with 150 women from the areas of Bormaa, Yamfe, Susuanso Adiobaa and Dua Yaw Nkwanta. Activities such as these acknowledge and enhance the contributions that women make to the economic aspects of the forest sector.

III. Women's contribution to forest health and productivity

7. Women, as a significant part of rural forest populations, are greatly affected by bushfires, the destruction of forest by insects and air pollution. Women recognize their vulnerability in this respect and have joined the fight against these threats to forest health and productivity. For example, women's organizations have coordinated programmes addressing the problem of bushfires to maintain forest health and, thus, their own livelihoods. For example, Green Earth Organization in Ghana organized five settlements with the Brong Ahafo region, which has been noted for frequent bushfires. Thirty women were trained in each settlement in 2000 to educate other members of the community to put a stop to the use of fire to clear farmland, which has helped reduce the incidence of harmful forest fires in their area.

8. Rural women are often the principal caretakers and guardians of the forests, seeing to the daily nurturing of forests around their homes to ensure their continued productivity. In many regions, women engage in agro-forestry in their home. In Thailand, for example, in the home gardens of a single village, researchers found 230 different plant species, many of which had been rescued from a neighbouring forest before it was cleared. And in a single African home garden, more than 60 species of food-producing trees were counted. Women are primary conservationists of forest species in their daily lives and are thus also key to the future productivity of forests.

IV. Women's contributions to maintaining forest cover to meet present and future needs

9. Women have extensive knowledge of forest resources. This helps them select specific forest foods that are an important source of income and nutrition for the family. As food supplements, forest foods provide certain nutrients that are not found in many staple crops, and may feed many families during hunger and famine caused by drought, floods, pests or diseases. The food security issue is a key one for women in forests and thus links women strongly to the need to maintain forest cover for their present and future needs.

10. In many parts of the world, women affect forest cover by being largely responsible for fuelwood collection. In Central America, for instance, over 50 per cent of the rural population depends on wood for energy. These activities give women unique and valuable knowledge about trees and forest products. Even women with little or no formal education know about the qualities of woods and locations of supplies and such ecosystem services as the value of tree leaf-litter for

soils and the medicinal values of barks, leaves and resins from trees. Nicaraguan women, for example, commonly know which tree species lasts longest as fuel and which types enhance flavours in food. Given their direct daily forest needs and their intimate knowledge of their local forests, women are a valuable resource for ensuring that forests are sustained to meet the needs of women and their families.

11. Experiences from all over the world over the years have already shown that women have great interest in defending and restoring the forest ecosystem so as to maintain forest cover and meet present and future needs. India's Chipko Movement is a famous example of women defending forests against destruction. In 1974, in the Reni Forest of the Chamoli District, 2,500 trees were given to commercial contractors. Women mobilized to form a human shield so as to protect the forest from being exploited. The contractors had to withdraw and the forest was saved.

(a) In Brazil, the Acao Democratica Feminina Gaucha (ADFG), a women's development-oriented organization, has developed into a strong environmental defender, opposing indiscriminate lumbering activities that destroy the Amazon rain forest.

(b) In the Philippines, the Lingkod Tao-Kalikason (secretariat for an ecologically sound Philippines), headed by two women and including many women members, promotes educational programmes on afforestation with the view to reversing the tragic destruction of the forests.

(c) Protest against deforestation is not the only response. Women are also leading attempts to reverse the destruction of the forest by planting trees. Kenya's Green Belt Movement, started in 1977 by the National Council of Women, the Green Earth Organization-Ghana and the Uganda Women's Tree Planting Movement-Uganda are well-known examples of positive developments. For example, Green Earth Organization led 320 women in 1998 and 1999 in an afforestation project at Aidozuaze in Western Region in Ghana. A fuel-efficient training workshop was organized in Manya Krobo District for 150 women in Ghana to reduce the burden of women in the daily search for fuelwood. Fuel-efficient stoves that are energy saving were introduced to these women. Another example is an International Tropical Timber Organization project in Ghana organized by the Ministry of Agriculture and the 31st December Women's Movement of Ghana, a local NGO. Nurseries were established in three ecological areas in Ghana, namely, Weija, Eduaden and Vea, and were managed by women. Smaller ones were developed in the ten regions of Ghana and in 1996, 304,800 seedlings were raised.

(d) In Côte d'Ivoire, many women have created a number of organizations that participate in forestry at a grass-roots level. These include cooperatives to carry out tasks such as seed collection, production of nursery plants and agroforestry. In the Central African Republic, women have formed associations to rehabilitate the heavily degraded urban forests.

(e) In Cameroon, similar women's organizations are involved in environmental protection activities. Some in the north of the country are engaged in tree planting to control the southwards advance of the desert. In Mundema in the south-west, adjacent to the Korup National Park, the largest wildlife reserve in the country, a group called Ekoso Bene Choco Libie has been active since the establishment of the Park. Kurop project commissioned the women to disseminate information and educate local people on the conservation of the environment.

V. Overarching constraints on women's organizations working in forests

12. Although women play multiple roles in protecting forest resources, they have little ownership or control over forest resources. An analysis of tree planting by women and men in 24 districts of Uganda by the Uganda Women's Tree Planting Movement demonstrates that women are significantly less likely than men to plant trees on homestead land, where the security of their duration of tenure is uncertain due to the likelihood of change in marital status. However, men and women are equally likely to plant trees in community woodlots where the duration of their tenure is secure if they remain village residents. These findings demonstrate the importance of attention to gendered security of tenure considerations at the sub-household level. This imbalance in the ownership and control over resources places women in a subordinate and disempowered position relative to men, relegating women to be forever dependent.

13. Adding to these difficulties, rural women usually lack access to credit and seldom own land. For example in Latin America, credit is often a bottleneck for all small farmers, but even more so for women, usually because of gender biases in credit policies. Participatory forest management must not only take into account gender differences in needs and priorities but also ensure women independent access and entitlements programmes that allow them to sustainably benefit from and protect forest resources.

14. A key constraint to involving women in sustainable forest management is the lack of women's technical and policy influencing capacity. In both developed and developing countries, women often lack basic understanding of governmental processes and are therefore not involved or do not involve themselves in any level of decision-making and policy formulation.

VI. Recommendations to the United Nations Forum on Forests, the Collaborative Partnership on Forests and other international forest policy players

15. **To promote women in forestry, it is suggested that:**

(a) Action should be taken to limit factors that hinder women's mobilization in forest management policy, such as the lack of water or distance to water points. Furthermore, broader, integrated development projects and programmes, in which forestry and environmental issues are only a component, would be more beneficial to rural women than narrow sectoral projects;

(b) Policies in certain sectors, such as land and tree tenure, should carefully be reviewed and assessed. Traditional tenure systems should be adaptable to current circumstances so as to provide equitable access to resources at the community level. Traditional systems should be harmonized with other rights, such as ensuring women equitable access to resources, education and development;

(c) Action should be taken to enhance women's full participation in the management of forests from the stage of conceptualizing policy through to

detailed planning and design of institutional mechanisms, to implementation, monitoring and evaluation;

(d) Policies and programmes should be redirected to make education and training more useful and accessible to women. Although gender disparities in education occur in many fields, the forestry and agriculture professions are the extreme cases of inadequate female representation. Education and training are key to greater involvement of women in forest management;

(e) Foresters should be trained in communication skills, extension techniques, gender analysis, rural sociology, social forestry and agro forestry, so as to become more aware of ensuring that more women are trained in forestry.

16. **The support of donors, bilateral and multilateral organizations is needed to promote women's participation in forestry and in natural resource and environmental management. More women professionals are needed to work in such organizations on these issues. Support to women may be provided in the following six major areas:**

(a) Provide the necessary resources for the training of women in forestry and natural resource fields, from the technical training of grass-roots women to professional training;

(b) Support forestry projects that empower women to manage resources, beginning with women's own priorities;

(c) Conduct research on women's activities that require gender-disaggregated data in area studies and impact studies. Organizations with such programmes might encourage using this data in their activities and fund national Governments and NGOs to undertake such studies;

(d) Finance and support communicating, networking and disseminating information gained from on the ground experience and research through audio-visual materials, publications, workshops, exchange visits and technical cooperation between and among NGOs;

(e) Ensure that international policy activities, such as the Tropical Forestry Action Programme, explicitly consider women's participation and the impact of programmes and projects on women;

(f) Finally, international forest policy players should take concrete steps to facilitate women's participation in international conferences and debates on forests and other development issues.

Notes

[1] Indoor Air Pollution Newsletter — Energy and health for the poor. World Bank ESMAP. Issue No. 1, September 2000; Issue No. 3, December 2000.

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Multi-stakeholder dialogue

Note by the Secretary-General

Addendum

Discussion paper contributed by the small forest owners major group:** building partnerships for sustainable forest management

Summary

Family forest owners and local communities are one of the most critical major groups for the implementation of sustainable forest management. Partnerships and genuine consultation with family forest owners and local communities on all levels, from local to global, will increasingly lead to a constructive implementation of international commitments on the ground.

Secure property and land tenure rights embedded in a reliable legal framework are at the basis of sustainable forest management. Ownership creates values and a sound responsibility to use and manage those values to the benefit of the immediate and wider social environment in the medium and long term.

Dealing with forest policy issues requires above all a long-term orientation and vision looking beyond the modern concept of shareholder value. There is not as yet enough understanding of the time value of forests, species and trees as compared with the time value of money.

* E/CN.18/2003/1.
** Family forest owners and local communities.

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Economic viability and profitability are at the core of the implementation of sustainable forest management. The variety of management conditions and cultures across the world requires innovation and flexibility in developing economically viable forest management approaches. A fresh look at the potential market value of non-wood goods and services is needed so that all elements of sustainable forest management contribute to economic value. Policy and decision makers are challenged to ensure the presence of fair market conditions to optimize the production of goods and services available through sustainable forest management.

The impacts of external policy on sustainable forest management often exceed the effects of policy from within the forestry sector itself. Forest health and productivity as well as maintenance of forest cover for present and future needs are clearly cross-sectoral challenges. Consequently, it is all the more important for the forest sector to be able to negotiate with other sectors that are in a position to address the root causes of conditions with an impact on sustainable forest management.

Family forest owners and local communities offer an intergenerational commitment to enhancing and developing the values linked with sustainable forest management.

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Annex

Experience in the field

I. Introduction

1. In its report on the first session of the United Nations Forum on Forests (E/2001/42/Rev.1-E/CN.18/2001/3/Rev.1) the Economic and Social Council stressed the importance of the involvement in the work of the Forum of major groups associated with forest management at the national, regional and global levels.

2. In light of this commitment by the United Nations Forum on Forests, the American Tree Farm System, the Australian Forest Growers, the Canadian Federation of Woodlot Owners, the Confederation of European Forest Owners and the Terra Folia System from Costa Rica undertook the task of developing a joint draft discussion paper to serve as input for the multi-stakeholder dialogue at the third session of the Forum.

3. Family forest owners and local communities are generally at the receiving end of policies developed in global and national policy forums. However, they are often the ones responsible for policy implementation on the ground and the translation of global and national agreements into practical action. They must face daily the complex challenges of balancing the often conflicting components of sustainable forest management.

4. The present draft discussion paper aims to build the bridge from practice to policy. It intends to highlight the need for partnerships on the ground relevant to the substantive elements of the third session of the Forum.

II. Background

A. The legacy of Rio and the encouragement of Johannesburg

5. Forests are at the basis for life on Earth. They perform a variety of functions and provide a diversity of goods and services to rural and urban societies.

6. The following principles of the Rio Declaration on Environment and Development[1] and the Johannesburg Declaration on Sustainable Development[2] must be at the core of all activities related to fostering sustainable forest management in all the regions of the world:

Rio Declaration

- "Human beings are at the centre of concern for sustainable development" (Principle 1)
- "... and other local communities have a vital role in environmental management and development because of their knowledge and traditional practices" (Principle 22)

Johannesburg Declaration

- "... sustainable development requires a long-term perspective and broad-based participation in policy formulation, decision making and implementation at all levels. As social partners we [the representatives of the peoples of the world] will continue to work for stable partnerships with all major groups respecting the independent, important roles of each of them"[3]

7. The Johannesburg Declaration emphasized a partnership approach to policies that genuinely address the problems and concerns of those that depend for their livelihood on the goods and services related to natural resources, and in particular, to forests. On that basis all interested and involved parties face the challenge of developing sound and long-term strategies for a dynamic evolution of sustainable forest management.

8. A total of 149 countries representing 85 per cent of the world's forests are currently engaged in nine regional forest policy processes. Their common goals are anchored in the forest principles agreed upon in Rio de Janeiro, Brazil.

9. The forest policy processes, which have taken up the political mandate from Rio, reinforced by the commitments from Johannesburg, South Africa, give priority to democratic solutions that originate within the regions, involving in the first instance those who live from and with the forest. Those processes share an inherent respect for each others' diversity. They are engaged in the development of criteria and indicators for sustainable forest management that reflect the variety of cultural, social, economic and ecological conditions for its implementation in each region. It is important to recall that the local culture is the essential prerequisite for sustainable forest management.

B. Family forest owners and local communities — the backbone for the implementation of sustainable forest management

10. There are a great many variations in ownership structures across the forest regions of the world.

11. In Europe and the United States of America more than 60 per cent of the forests are owned and managed by individual families and local communities. Australia, Canada and Costa Rica also have substantial forest areas in the hands of individual families and local communities. Australia is currently working towards using trees as environmental solutions and integrating them into a farm landscape as well as into traditional "forest" blocks.

12. Family forest owners and local communities have a genuine interest in a balanced approach to sustainable forest management, knowing that the generations to follow will also depend on goods and services from their forests. The responsibility of family forest owners and local communities to maintain the forest on a long-term basis is firmly rooted. They associate a set of values with their forests that they do not want to put at risk. The bond between rural populations and forests and forest management in its many forms is something very special.

13. Generation-bridging experience in management of natural resources has enabled family forest owners and local communities to acquire a wealth of practical knowledge and know-how that has not received adequate recognition from policy makers or decision makers. Through their day-to-day work with the forests, family forest owners and local communities are in a unique position to learn continuously and understand the complex dynamics of forest management. In a partnership approach they stand to gain access to regional, national and international networks and new technologies as well as to scientific, financial and political support for their joint or individual projects.

14. Family forest owners and local communities have been the first to realize that time has a different value and dimension when it comes to forests. Generally it is not an easy message to convey in a modern society used to instant communications and split-second decisions. The average political mandate of four to five years is little more than an instant in the life of a tree and a forest.

15. Thus, policy and decision makers are challenged to look far beyond normal planning periods in developing policies and strategies for sustainable forest management. By contributing a holistic and intergenerational approach and perspective to sustainable forest management, family forest owners and local communities can make a significant contribution to the development of the long-term perspective needed for sustainable forest management.

C. The importance of secure property and land tenure rights and the need for a reliable legal framework

16. The basis for sustainable forest management, including all its economic, social, cultural and ecological goods and benefits, is secure property and land tenure rights. Without secure property and land tenure rights, neither a sense of responsibility nor an interest in managing forests in a way for them to meet present and future needs can be developed.

17. Ownership creates value. Giving the right of ownership to a large number of people enhances the creation of value. An owner's right to use and manage the multiple goods and benefits of forests contributes to a strong sense of responsibility for the conservation of that natural heritage. At the same time the variety of management aims and practices will lead to variety in forest structures and species composition that in turn, enhance stability and ecological diversity.

III. Implementation of the Intergovernmental Panel on Forests/Intergovernmental Forum on Forests proposals for action

A. Economic aspects of forests, including trade

18. Economic viability is the key to carrying out sustainable forest management. Without a dependable income, family forest owners and local communities will not be in a position to invest in reforestation. Financial security is needed for the enhancement of social and cultural values and for good management, taking into consideration ecological value. Fair market conditions, fair and effective tax policies and a long-term reliable legal framework that is effectively enforced are minimum requirements for economically viable forest management.

Wood and lifestyle — meeting consumer needs in the twenty-first century

19. One main asset of sustainable forest management is the production of wood, the most promising and multifunctional natural resource of the twenty-first century. Wood is both the oldest and the most modern renewable material used by mankind. No other renewable resource has the same variety of applications as wood and wood-based products.

20. Wood is still used to meet the basic requirements for survival, including heating, cooking and shelter. New technologies allow increased efficiency and an enhanced use of nearly all timber grades and sizes, from small dimension timber to large dimension quality timber, creating added value throughout the processing chain. Wood and wood-based products are regarded as high-tech materials with almost no technical barriers to their application. Demand continues to increase for the use of wood products as biomass for fuel and electricity.

21. Life cycle analysis and the performance of wood in environmental impact assessments offer ample opportunities for wood and wood-based products to demonstrate their versatility and unique characteristics as the renewable raw material. In addition, these products provide a wide scope for individual taste, establishing a basis for sustainable development and meeting society's requirements for products that are natural and healthy. Family forest owners and local communities, and their local and wider networks, have to increase their efforts to improve society's understanding of sustainable forest management, as a way to strengthen markets for the "fruits" of their work.

Certification — the marketing bridge from the forest to the consumer

22. Over the last decade a number of nationally initiated certification systems have evolved, based on criteria and indicators developed within the regional forest policy processes (see chap. II, sect. A). The objective of those systems is to communicate the quality of sustainable forest management to the consumer.

23. The proponents of national certification systems are well aware that there is no "one size fits all" solution when it comes to the certification of sustainable forest management. Family forest owners and local communities strongly support national initiatives based on open dialogue and cooperation that lead to shared responsibilities between national expertise and local people. It is the responsibility of democratically elected policy makers to support these national initiatives as they translate the political will of regional forest policy processes into action.

24. Some experiences have shown that certification has the potential to lead to genuine partnerships, in particular at the local and regional levels, between forest owners, the manufacturing and processing industries, local and regional environmental organizations and other interested and involved civil society representatives. The basis for these partnerships is a common vision for the long-term sustainable management of forests that is able to fulfil the needs of all participating parties.

25. Family forest owners and local communities have in a number of regions envisaged forest certification as an important communication tool. Certification can demonstrate their commitment to sustainable forest management and increase the awareness of consumers of the sustainability of wood and wood-based products, including the need for higher timber prices to enhance the economic viability of sustainable forest management. However, there is as yet no recognition of that commitment through consumer behaviour in the marketplace.

Internalization of externalities

26. In the basic theories of economics it is presumed that the price for a good is established through the market. Supply and demand determines the price when

competition is free. In a free-market economy prices are used to allocate scarce resources efficiently. However, current timber prices do not take the externalities of sustainable forest management into consideration.

27. In addition to timber management, sustainable forest management covers a variety of other management activities, most of which do not have associated market prices. These include water management, wildlife management, soil management, leisure service management, environmental education and scientific research. If the demand for a particular non-market management activity increases, the ability of marketable activities to cover the costs decreases.

28. The challenge is to find an adequate and appropriate way for society to recognize the economic value of and share in the costs of all of these integral elements of sustainable forest management. Society's perception often makes no distinction between publicly and privately owned forests. This may increasingly lead to conflicts in cases where the demand of the society for non-marketable goods and services leads to restrictions on the management of the forest, with a resulting decrease in income from marketable products.

29. To maintain and enhance economic viability for family forest owners and local communities, further efforts are needed to develop the market potential of non-marketable goods and services. An adequate valuation of externalities is needed to serve as a basis for mechanisms to compensate family forest owners and local communities for the cost of providing non-marketable goods and services to society.

The role of family forest owners and local communities

30. Experience in Europe shows that the degree of organization of forest owners has a high impact on economic viability. Often the small size of the management unit does not allow individual forest owners to carry out economically viable forestry. Voluntary cooperation between a number of family forest owners and local communities strengthens their position in the market and provides a means to find new ways for the promotion of their products. Family forest owners and local communities that operate as part of a social network in rural areas and in cooperation with other involved and interested parties have the ability to seek and raise awareness of new market opportunities.

B. Forest health and productivity

31. Forest health and productivity are influenced by a number of factors lying outside the sphere of influence of family forest owners and local communities. Most prominent are the effects of transboundary air pollution on forest health and productivity and the interrelationship between transboundary air pollution and climate change. Although research is still at an early stage in defining those effects and relationships, observation and practical experience in the field show that there are direct impacts on the water regime as well as on the vitality of soils, both crucial elements for the health and stability of the forests and thus for the viability of sustainable forest management. Climate change, in turn, might lead to changing growing conditions. At present it is not known if those changes will proceed slowly or rapidly. The change in average temperature that has already occurred will lead to effects such as increased damage by insects and diseases. Transboundary air pollution, its interrelationship with climate change, and their effects on forests

require much more basic research to avoid false assumptions leading to unsound policy decisions.

32. Currently policy negotiations are seeking linear solutions rather than taking a holistic cross-sectoral approach. Family forest owners and local communities note with great concern that the reduction of greenhouse gas emissions and thus air pollution as the main causes for global warming are no longer the focus of international negotiations. Discussion has shifted to the best possible allocation of sinks. The inclusion of family forest owners and local communities would encourage a more balanced approach to the discussion and take into account all points of view concerning the actions needed, reviewing in particular the potential of wood as a carbon-neutral renewable energy source substituting non-renewable fossil fuels and thus combating climate change.

The situation of family and community forest owners

33. Natural disturbances, such as flooding, drought periods and storms, often have disastrous impacts on the livelihood of family forest owners and local communities. Their frequency over the last decade has clearly increased and often does not leave enough time between events to stabilize the damaged forest areas. Family and community forest owners have increased their efforts over the recent decades to choose site-adapted species and to develop site-adapted management systems to minimize the deleterious impacts of natural disturbances.

C. Maintaining forest cover to meet present and future needs

34. Sustainable forest management will succeed when society recognizes and values all goods and services that forests provide. Without the values and responsibility that are based on ownership, forests are regarded as inferior to other land uses and their existence is put at risk.

35. The maintenance of forest cover to meet present and future needs is clearly a cross-sectoral challenge for which different priorities, values and needs have to be reconciled. It is the responsibility of the forest sector to make its voice heard in the web of conflicting interests to ensure that forests receive holistic treatment that is equal with that of other land uses.

The role of family and community forest owners

36. In Europe, where 60 per cent of the forests are owned and managed by families, the forest area increases by 360,000 hectares per year.[4] Recognition of and respect for secure property and land tenure rights ensure a long-term commitment to sustainable forest management by family forest owners and local communities. If the variety of goods and services provided by forests receive adequate valuation, family forest owners and local communities will continue to invest in sustainable forest management to the benefit of their children, grandchildren and society as a whole.

37. One of the great challenges for family forest owners and local communities will be to point out repeatedly to policy and decision makers that sustainable development, in particular sustainable forest management, starts with long-term strategies and cannot be based on short-term profit calculations.

IV. Conclusion

38. **Policy makers and decision makers are encouraged to look to family forest owners and local communities as partners in the implementation of consistent strategies for sustainable forest management.**

39. **There is an increasing awareness that sustainable forest management is not viable without being embedded in a larger sustainable development strategy that addresses positive and negative impacts on forests and forestry.**

40. **Family forest owners and local communities are committed to the following:**

- **to contributing their share in identifying major challenges in the implementation of sustainable forest management**
- **to making their knowledge and know-how available in efforts to address those challenges**
- **to accepting their responsibility to contribute in the best possible way to long-term strategies for sustainable forest management.**

V. Proposed actions for policy makers and decision makers

41. **The main challenge for policy makers and decision makers in implementing the IPF/IFF proposals for action is the need for a commitment to long-term vision and strategies that adequately recognizes the time value of forests, trees and species.**

42. **Concerning the substantive elements at the third session of the United Nations Forum on Forests, to capitalize on the work already achieved, policy makers and decision makers are requested**

(a) **To secure sustainable forest management through respect and clarity in secure property and land tenure and harvestable rights. Motivation for long-term sustainable forest management must start at the local level — family forest owners and local communities with generation-bridging experiences in sustainable forest management are key partners in the implementation of long-term sustainable forest management. They base their investment in sustainable forest management on a fundamental need for secure property rights, including commercial access to the resource, respect for individual freedom and a long-term reliable legal framework that is effectively enforced;**

(b) **To strengthen sustainable forest management through investment at the local and regional level. Sustainable development depends on continuous and sustainable public and private investment at all levels. This includes investment in social capacity and economic viability and in sustaining the vitality of flora and fauna to provide market and non-market benefits. Economically viable forest management is an absolute prerequisite for long-term sustainability;**

(c) To encourage sustainable forest management through a well-defined national forest policy that puts adequate means and tools in place to help family and community forest owners to help themselves, including incentives for voluntary cooperation, capacity-building/training and retraining facilities;

(d) To invest in basic research on the complexity of transboundary air pollution, its interrelationship with climate change and its effects on and implications for forests and sustainable forest management;

(e) To stress with other sectors the need for joint action at the international level to reduce greenhouse gas (GHG) emissions and their impacts on forests and sustainable forest management;

(f) To work towards a harmonized early warning system for natural disturbances and to assure adequate security networks, in terms of financial and human resources, to facilitate the restoration of damaged forests.

Annex

Experience in the field

1. There are many good examples of initiatives that family forest owners and local communities have developed to restore the economic viability of forestry at the local and regional level. Two examples follow.

Family forestry at the core of rural development: an example from the region of Bavaria in southern Germany

2. In 1969 a forest owners' association was established in Kempten (Allgäu) to address the structural disadvantages of small family forest holdings. Today, it has over 1,500 members who together are responsible for the management of 6,500 hectares of forests. The association sells from 60,000 to 70,000 cubic metres of standing timber of all types, plus plant products and seeds, ornamental logs and Christmas trees, and it also fills special orders, such as timber harvested at the full moon and hop poles. Another forest product that has been increasingly marketed in recent years is wood for energy production. As it differs from traditional forestry products with regard to procurement, trade and sales, a new company was set up to market this wood (chopped logs, billet wood).

3. The biomass association of Allgäu was founded in 1997. The association has two shareholders. The main shareholder (51 per cent) is the board of the forest owners' association, ensuring that the community of forest owners in Allgäu always has a say in the biomass company. The second shareholder, an associated company consisting of 114 members (80 family forest owners, six local authority forest owners, seven forestry owning sawmills and other forest owners such as banks, haulage contractors, retailers, tradesmen and government officials) holds 49 per cent of the shares. The mixed shareholder composition creates optimal synergy effects.

4. Deriving energy from wood is in fact an age-old process, but in some ways, it has unfortunately to be completely rediscovered. Some local production and supply cycles exist, but there is no large-scale, professional and consumer-oriented marketing of wood for energy production across a wider area, such as that existing for other types of fuel. The biomass association of Allgäu has economic, social and environmental aims. A core task is thus to provide an environmentally compatible, locally produced, carbon dioxide-neutral energy source from local agriculture and forestry. Energy from wood is in many ways very environmentally friendly. It saves enormous energy potential in production, processing and transport, as all operations take place in the forests of Allgäu. The added value thereby created (for forest owners, tree fellers, forestry workers, transport services, trade and retailers) stays entirely in the region; it creates jobs in agriculture and forestry, and also in small and medium-sized commercial and engineering companies. Consumers are increasingly attracted by this service. More and more, they are using wood as a fuel, now that the delivery and quality standards are secured through a professionally organized association.

5. It is still too early to quantify the positive effects on the forests themselves, as many forest owners have only recently started to respond to the incentive to take care of poor stands, tackle reserves affected by the bark beetle and plant new mixed stands. It is clear, however, that the marketing of wood for fuel has an enormously positive effect on agriculture and forestry and is beneficial for the ecology of

forests, owing to better care of poor stands and the replanting of more natural forests.

FUNDECOR and the Terra Folia project: an example from the Caribbean lowlands of Costa Rica

6. In 1989 a local non-governmental organization, the Foundation for the Development of the Central Volcanic Range, was established through a collaborative, multinational effort to achieve the following objectives:

- To promote the carbon sequestration programme of the United Nations through the CARFIX project
- To promote sustainable forest management in an embattled region of large agribusiness and impoverished local communities
- To help to expand a very significant biological corridor

FUNDECOR was responsible for promoting, organizing, administering and supervising individual contracts with private landowners with a primary concentration in the Caribbean lowlands of Costa Rica along the north-eastern border of Braulio Carrillo National Park.

7. Funding was set up through foreign and national contributions, including a significant amount of capital made available through what has now become known as "debt-for-nature swaps", a practice that allowed the forgiveness of a portion of Costa Rica's foreign debt in exchange for the local government's placement of standing forest under permanent legal protection status.

8. Today FUNDECOR supervises over 500 individual contracts covering an area of 42,000 hectares. Most of these contracts are with rural-based families who do not have much land but would prefer to keep as much as possible in forests. Specific contracts break down into three categories: (a) sustainable extraction, 22 per cent; (b) pure protection, 70 per cent; and (c) reforestation, 8 per cent. Within the principles of sustainable forest management, FUNDECOR and its local partners encourage diverse activities in agroforestry, including not only ecotourism, but also the cultivation of marketable and/or endangered species of flora and fauna.

9. **The Terra Folia project**. Terra Folia promotes regenerative forest management as a guiding principle. Under the terms of its third forest contract with the Government of Costa Rica (2003-2008), over 90 per cent of the reserve is protected against any extraction of flora and fauna, including trees. The location nine kilometres off the electric "grid" offers some interesting challenges. It has been learned the hard way that sustainability is a practical concept, and it is hoped that this realization will lead to significant progress towards setting an example in the neighbourhood. Some highlights of the Terra Folia operation include the following:

- **Monkey house** (wilderness ark). Using a chainsaw and sliding frame, most of the lumber from natural tree-falls (and scraps left by previous owners) was harvested. The structure employs a passive solar design, and stream water is gravity fed. Even though the lodge sits under dense canopy on a narrow bridge above the Rio Tigre, all trees and one rather large rock were left untouched. In trying to integrate the design concepts with the natural flows of wind, water and wildlife, most of the structure is open as one is immersed in the local ecology

- **Bio-paths**. Over the last decade an innovative trail system has been engineered, focusing on the natural history of certain target species to minimize human impact on local habitat and sometimes providing excellent viewing opportunities

- **Ecotourism**. An effort is made to target the more modest (and ideally more sustainable) segments of the market, such as experimental education and wilderness orienteering. A five-year-old student intern programme for rainforest action volunteers has been a logical extension into the local community, providing valuable interaction between local families and foreign nationals

- **Reforestation**. In 1994, in an area of cow pasture and with the help of FUNDECOR, a small reforestation of 10 hectares with four native species of semi-hardwoods was established. That area is now the site of Terra Folia's new field station, Los Pilones. Soon thereafter at another section of former cow pasture, Patas Peladas, a small nursery operation was established to collect and nurture the project's own seedlings, and a few hundred pineapples were planted just for fun.

Contact information

American Tree Farm System
Bob Simpson
E-mail: bob_simpson@affoundation.org
Internet: http://www.treefarmsystem.org

Australian Forest Growers
Warwick Ragg
E-mail: warwick.ragg@afg.asn.au
Internet: http://www.afg.asn.au

Canadian Federation of Woodlot Owners
Peter de Marsh
E-mail: nbfwo@nbnet.nb.ca

Confederation of European Forest Owners
Natalie Hufnagl
E-mail: hufnagl@cepf-eu.org
Internet: http://www.cepf-eu.org

Terra Folia System
Rick Chatham
E-mail: terrafolia@aol.com
Internet: http://www.terrafolia.com

Notes

[1] *Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992* (United Nations publication, Sales No. E.93.I.8 and corrigenda), vol. I: *Resolutions Adopted by the Conference*, resolution 1, annex II.

[2] *Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August-4 September 2002* (United Nations publication, Sales No. E.03.II.A.1 and corrigendum), chap. I, resolution 1, annex.

[3] Ibid., para. 26.

[4] Economic Commission for Europe, and Food and Agriculture Organization of the United Nations, *Forest Resources of Europe, CIS, North America, Australia, Japan and New Zealand: Main Report*, Geneva Timber and Forest Study Papers, No. 17 (United Nations publication, Sales No. 99.II.E.36).